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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,622	12/02/2003	Stefan Assmann	P03,0479	4948

7590 08/23/2007  
SCHIFF HARDIN & WAITE  
Patent Department  
6600 Sears Tower  
233 South Wacker Drive  
Chicago, IL 60606

EXAMINER
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MEHTA, PARIKHA SOLANKI

ART UNIT	PAPER NUMBER
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3737

MAIL DATE	DELIVERY MODE
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08/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/725,622

Applicant(s)

ASSMANN ET AL.

Examiner

Parikha S. Mehta

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by NessAiver (US Patent No. 5,329,925), hereinafter NessAiver ('925).

**Regarding claims 1, 5, 6, 11 and 12**, NessAiver ('925) discloses a method, apparatus and computer-readable medium for blood flow measurement during the cardiac cycle, including means and steps for acquiring and displaying an overview image (col. 9 lines 59-60), quasi-simultaneously acquiring data for reference and motion sensitized images wherein non-stationary tissue is shown in successive, different positions, (col. 8 lines 31-34) , and generating and displaying the reference and motion sensitized image series in an integrated manner on a video monitor (col. 6 line 53 – col. 7 line 5). The reference and motion sensitized image data sets constitute anatomical and speed-resolved image data, respectively, as claimed in the instant application. The video means and steps of NessAiver ('925) constitute means and steps for displaying the image series as a movie as claimed in the instant application.

**Regarding claims 2 and 3**, NessAiver ('925) discloses means and steps for segmenting the image data (col. 5 lines 5-19).

**Regarding claim 4**, NessAiver ('925) states that the motion sensitized/speed-resolved images may be color coded (col. 8 lines 15-20).

**Regarding claim 7**, the method of NessAiver ('925) would inherently involve the operator visually observing the cine series on the display screen, as the step of displaying the series is not useful nor practical without the step of observing said series. The act of observing subsequently includes manual identification of the moving region on the display, as the operator would be able to see which regions of tissue are in motion and which regions are stationary by watching the series.

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**Regarding claim 8**, the heart, as imaged by NessAiver ('925) can be reasonably interpreted to constitute a plurality of moving regions as claimed in the instant application.

**Regarding claim 9**, NessAiver ('025) discloses acquiring image data over a cardiac cycle (col. 8 lines 31-34).

**Regarding claim 10**, NessAiver ('925) discloses acquiring at least 20 images per cardiac cycle (col. 5 lines 5-19).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Frank (US Patent No. 4,947,120) discloses a related method and system for simultaneously acquiring MR image data for stationary and moving elements within an anatomical region.

5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha S. Mehta whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Parikha S. Mehta

Examiner – Art Unit 3737



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